10. Roman Numerals

Program Name: Roman.java   Input File: roman.dat

The object of this program is to convert from Roman numerals to Arabic. Roman numerals were used by the Romans until the current system came into widespread use.

In this system, numbers were represented by uppercase letters:

I = 1
V = 5
X = 10
L = 50
C = 100
D = 500
M = 1000

The value of a number written in Roman numerals is obtained by adding up the values of all the letters. Simple, right? The letters are by default written in decreasing order of value. There is one complication -- sometimes there are letter pairs where a lower valued letter is followed by higher valued one. The value of this combination is the difference of the values of the two in the pair. There will be no 'run' of three of more letters in increasing value order.

Input
The input file consists an initial value N, followed by N Roman numerals, one per line.

Output
For each Roman numeral, output that numeral followed by its Arabic (decimal) equivalent.

Example Input
```
3
XIX
MCMLIII
MMMIXIV
```

Example Output
```
XIX = 19
MCMLIII = 1953
MMMIXIV = 3013
```